

The Central District is pleased to bring you the latest information concerning utility rates, project developments, Public Service

Commission actions and other news you can use. I hope you will find this information to be a useful resource to learn about the Public Service Commission, consumer issues and the continuous work we are doing for the citizens in the Central District and across the state of Mississippi. Thank you again for allowing me to serve you in this capacity.

Brut Bully

NERC State of Reliability Report Finds Grid Remains Reliable and Resilient; Challenges to Continued Reliability Grow

North American Electric Reliability Corporation's (NERC) <u>2023 State of Reliability</u> (SOR) report finds that overall, the North American bulk power system (BPS) remains highly reliable and resilient. However, extreme weather events continue to pose the greatest risk to its reliability and stability. While transmission system reliability has improved significantly for the fifth consecutive year, conventional power generation experienced its highest level of outages overall since NERC began tracking power generation availability data. The graphic below identifies the 18 separate billion-dollar weather-related disasters in 2022, illustrating the major reliability threat events on

the North American grid.

Power generation saw its worst "weighted equivalent forced outage rate" in 2022. Increasing outage rates for coal over the last fiveyear period and the unavailability of gas -fired generation during the winter months has contributed to major load-loss events.

The most significant reliability event of the year was the winter storm in



December 2022, also known as "Elliott," which impacted the central and eastern U.S. and prompted a joint inquiry from FERC and NERC into what happened. In response to these and other recent cold weather events, NERC issued a Level 3 "essential action alert" this May to tell the industry to increase its preparedness for the upcoming winter.



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Winter Storm Elliott and other similar events ones also indicate that the performance of intermitted resources have to be improved if the grid is to benefit from their rapid expansion. NERC is working to upgrade its standards to address the issue, and FERC launched a rulemaking on it last year.

Physical and cyberattacks on grid assets are increasing, and that reinforces the need for the further development and adaptation of standards and guidelines. The increasing penetration of distributed energy resources call for more focus on cyber and physical security standards and guidelines to keep up with evolving threats. Hostile nation states are continually targeting North American critical infrastructure and are constantly devising methods to compromise the grid's security, reliability and resilience. Homegrown extremists have also targeted the grid.

In 2023, Mississippi has already experienced devastating tornadoes, flash flooding, multiple days of severe storms, and sweltering temperatures. These events have led to more than 100,000 power outages, destroyed homes and businesses, and induced mental, physical and financial stress. The large majority of the June 2023 storm outages were the result of damage to the distribution network. Distribution networks carry power the last few miles from the substation to the customer.

The detection of and the response time to address failures in electrical distribution networks are key metrics in evaluating the performance and management of electric delivery systems by utilities. Where company responses to failures are delayed, continuous severe weather can rapidly increase failure rates and create customer dissatisfaction. Mississippians experienced prolonged outages in mid-June 2023, and the MPSC continues to encourage Entergy customers to share their experience during the June 2023 Storms. Please submit your thoughts and recommendations to emlresponse@psc.ms.gov.

Reducing Outages Through System Hardening

After a string of hurricanes hit the state of Florida in 2004 and 2005, it became apparent that actions were needed to ensure Florida could rebound more quickly from major storms. A Florida PSC workshop led to the development of electric infrastructure storm hardening initiatives. These initiatives included maintaining a high level of storm preparedness, strengthening electric delivery infrastructure, and strategic undergrounding of electric facilities.

The grid hardening initiatives greatly increased the speed at which the system recovered from subsequent hurricanes. And just as importantly, having a robust communication strategy and leveraging various social media platforms provides customers with the most current outage and restoration information. The table below shows the dramatically improved system restoration speed after hardening efforts:

Table 1: Hurricane Information		
	Customer Outages in Florida	Time to 95% Restoration in Days
Hurricane Charlie (2004) ⁶	600,000	13
Hurricane Wilma (2005) ⁷	3,200,000	18
Hurricane Irma (2017)	4,000,000	6
Hurricane Ian (2022)	2,600,000	3.8*

^{*}Restoration was already 2/3 complete by the end of the first day



Energy News and Notes

Mississippi Power Co. Helping Its Customers Beat the Heat

The Mississippi Power Foundation, which is funded by the company's shareholders, is donating \$350,000 to the United Way to <u>assist customers</u> with their electric bills. Customers across the company's 23-county service territory are eligible to apply for assistance. In the Central District, Mississippi Power Co. serves customers in Lauderdale, Leake, Neshoba, Newton and Scott counties.



Any Mississippi Power residential customer with a demonstrated financial need can apply for bill assistance by calling 228-701-0555 to speak with a representative from Catholic Charities, who is administering the assistance on behalf of United Way. In addition, Mississippi Power Customer Service is suspending customer disconnections and late fee charges through Labor Day weekend.

Georgia Power's Plant Vogtle Unit 3 in Operation

On July 31, Georgia Power <u>declared</u> that its Plant Vogtle Unit 3 had entered commercial operation and is now serving customers across the State of Georgia. The final stages of construction and testing continue at Vogtle Unit 4, with the unit projected to be placed in service during the late fourth quarter 2023 or the first quarter of 2024. Southern Nuclear will operate the new units on behalf of the co-owners: Georgia Power, Oglethorpe Power, MEAG Power and Dalton Utilities.

Vogtle 3 is the first new nuclear reactor to start up in the United States since the Tennessee Valley Authority's Watts Bar 2 was commissioned in 2016. The new 1,114 megawatt (MW) Unit 3 reactor joins two existing reactors at Plant Vogtle. The plant's first two reactors (Vogtle 1 and 2), with a combined nameplate capacity of 2,430 MW, came online in the late 1980s. The two new reactors (Units 3 and 4) combined with the two existing reactors (Units 1 and 2) will make Plant Vogtle the largest nuclear power plant in the country, surpassing the 4,210 MW Palo Verde plant in Arizona.

Units 3 and 4 are the first U.S. deployment of the AP1000 Generation III+ reactor. This next generation advanced reactor has a smaller footprint and simpler design than previous generation reactor technologies. It also features robust passive safety systems that can shut down the reactor without any operator action or external power source. Originally expected to cost \$14 billion and begin commercial operation in 2016 (Vogtle 3) and 2017 (Vogtle 4), the project ran into significant construction delays and cost overruns. The total cost of the project is now estimated at approximately \$35 billion.

With 95,881 MW of nuclear power capacity at 93 operating commercial reactors, the United States has more nuclear capacity than any other country. Nuclear power plants produce nearly 20% of the country's electricity and 50% of the nation's carbon free energy.

Natural Gas Prices Steady Despite Increasing Temperatures

The Henry Hub natural gas benchmark price averaged \$3.30/MMBtu in January 2023 on an inflation-adjusted basis and then dropped to \$2.18/MMBtu by June. When adjusted for inflation, the first half of this year has seen the lowest average monthly Henry Hub price since June 2020. Relatively mild winter temperatures reduced demand for space heating across most of the United States thus reducing natural gas consumption. U.S. dry natural gas production has outpaced demand so far in 2023 also contributing to lower natural gas prices.



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June and July 2023 could be the hottest in recorded global temperature history beginning in approximately 1850. The heat dome that has been on top of the southern U.S. helped push natural gas flows for electric generation to an all-time record of 51.1 Bcf on July 26. Despite the record temperatures and record demand for natural gas to generate electricity, future prices at the Henry Hub were trading below \$2.60/MMBtu. The twelve-month strip for natural gas prompt-month futures continues to remain below \$4.00/MMBtu. The Energy Information Administration forecasts Henry Hub prices will increase from the current price to \$3.44/MMBtu in December 2023, averaging \$2.83/MMBtu over the last six months of 2023.

TVA to Purchase More Solar and Battery Storage Capacity

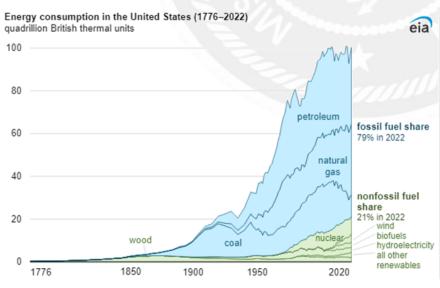


Earlier this year, the Tennessee Valley Authority (TVA) announced it will purchase the energy from 6,000 MW of solar power and battery storage this summer as it progresses toward a goal of obtaining 10,000 MW of solar by 2050.

TVA received proposals for nearly 14,000 megawatts of renewable and other clean energy in response to its appeal for carbon-free energy offers. TVA's review of the offers determined 6,000 megawatts of proposals, representing about 40 solar farms across the Tennessee Valley, were workable and efficient enough to be pursued by TVA. TVA plans to begin awarding contracts for the additional solar power within the next 60 days and hopes the solar arrays can be built and produce power by 2032 or sooner.

Fossil-Based Energy Accounted for 79% of U.S Energy Consumed in 2022

Primary energy consumption in the United States totaled 100.4 quadrillion British thermal units (quads) in 2022, a 3% increase from 2021. About 21% of U.S. energy consumption in 2022 came from non-fossil fuel sources such as renewables and nuclear. Fossil fuels—petroleum, natural gas, and coal—accounted for 79% of total U.S. energy consumption in 2022.



Petroleum has been the most consumed energy source in the U.S. since 1950. U.S. petroleum consumption totaled 35.8 quads in 2022. The transportation sector accounted for most of the petroleum-fueled energy consumption.

U.S. natural gas consumption totaled 33.4 quads in 2022, the most natural gas consumption in the United States on record. Growth in U.S. natural gas consumption has largely been driven by increased use of natural gas in the electric power generation sector.

Renewable energy consumption in the U.S. increased to a record-high

13.2 quads in 2022. Increased use of renewables for electricity generation, particularly from wind and solar, largely drove the rise in renewable energy consumption.



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U.S. coal consumption fell to 9.8 quads in 2022. Reduced coal use in the electric power generation sector has driven much of this decline.

Consumption of nuclear energy totaled 8.0 quads in the U.S. in 2022. A small decrease was driven by the closure of the Palisades nuclear power plant in May 2022.

Last Week at the MPSC

- Great River Utility Operating Co., LLC also filed its Verification of Notice to Customers in regards to its Petition for a Certificate of Public Convenience and Necessity Approving the Provision of Wastewater Disposal Service in Lauderdale County to the Huntington Park Subdivision.
- ☐ Great River Utility Operating Co., LLC filed its <u>Verification of Notice</u> to Customers in regard to its Notice of Intent to Establish Initial and Temporary Rates for Wastewater Disposal Service for Huntington Park Subdivision in Lauderdale County. The proposed initial and temporary rate for wastewater disposal service is \$27.00.
- Atmos Energy Corporation confidentially filed its Quarterly Report for the period of April 2023 through June 2023.
- ➢ Spire Mississippi Inc. filed a Motion for Extension of Time to file its Annual Energy Delivery Plan. The Plan was due on August 1, 2023. However, Spire is still in the process of preparing it, and therefore it requests that the Commission grant Spire an extension of time until August 14, 2023.
- Metropolitan Telecommunications of Mississippi, Inc. filed its Withdrawal of Competitive Access Provider Services Tariff No. 3. Metropolitan Telecommunications of Mississippi, Inc states that rate reductions, mandated by the FCC over the last number of years, have reduced switched access rates to a level where it is no longer economical to continue billing for these services.
- Southern Spirit Transmission LLC filed its <u>Response</u> to Entergy Mississippi, LLC's Comments on Proposed Scheduling Order in regard to Southern Spirit Transmission LLC's Supplemental Petition for a Certificate of Public Convenience and Necessity for the Proposed Southern Spirit Transmission Project.
- The Commission issued its Notice of Hearing in regard to the Petition of Cooperative Energy for Certificate Of Public Convenience and Necessity Authorizing them to Acquire, Construct, Own and Operate Electrical Transmission Lines, GOAB, and Switching Station Facilities in Claiborne, Copiah, and Hinds Counties. The hearing will be held on Tuesday, August 29, 2023, at the Claiborne County Board of Supervisors Board Room, 510 Market St, Port Gibson, MS 39150 beginning at 5:30 p.m.

Let's help Mississippi 811, Inc. spread the word about their upcoming blood drive in Pearl on August 11, National Safe Digging Day! This

is an excellent opportunity for all of us to promote safe digging and save lives. Don't forget to call #ms811 before you dig!

SAVE THE DATE

SAVE A LIFE GIVE BLOOD!

It takes less than 1 hour to donate blood & make a difference. Food, door prizes & gift cards will be provided by our sponsors.

Where: MS 811 Inc 200 Country Place Pkwy, Pearl, MS

CENTRAL DISTRICT SNAPS



We kicked off Wednesday morning with the Beat 3 breakfast bunch at Primos to get the pulse on local and state issues.



We followed breakfast up with the Reunion Parkway Groundbreaking Event to celebrate the construction of a new east/west corridor in Madison County.









Last week, our Consumer Complaint Specialists handled a total of 34 complaints in the Central District.

Electric Companies 30
Water/Sewer 3
Natural Gas 1